# Provisional/Emergency Certification Sequoia Voting Systems Version 4.0

## Conducted by the Office of the Secretary of State and the Pierce County Auditor

Welcome and Introductions – Pat McCarthy, Pierce County Auditor

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### **Purpose – Pat McCarthy**

The purpose of this test is to certify Sequoia Voting System Version 4.0 for use in Pierce County. This certification is necessary to support the conduct of Ranked Choice Voting. Pierce County's Charter requires that the Auditor implement Ranked Choice Voting prior to July 2008.

Pierce County Elections requested the Secretary of State to certify the tabulation system on an Emergency/Provisional basis due to the delayed certification of the system by the Election Assistance Commission. State law allows for emergency certification when the failure to do so could materially affect the lawful conduct, efficiency, accuracy, or security of an upcoming election.

The certification of voting systems in Washington State is codified in the Revised Code of Washington Chapter 29A.12 and Washington Administrative Code Chapter 434-335. Copies of these chapters are attached.

### Test Plan

### Schedule

### **Tuesday, May 13, 2008**

### **Primary Election**

Functional Test 400C Insight Edge

Volume Test 400C Insight Edge

### **Primary and General Election**

Functional Test – Launch Simulation Script Early Vote Edge

### Wednesday, May 14, 2008

### **Primary and General Election**

Functional Test – Review Results Early Vote Edge

### General Election - Traditional Ballot Card plus RCV Ballot Card

Functional Test 400C Edge

Ranked Choice Voting Advancement and Algorithm Test

Volume Test 400C Absentees Polls Edge

### **Thursday, May 15, 2008**

### **General Election**

**Volume Testing Continues** 

### Friday, May 16, 2008

Testing continues if necessary

### Functional Test - 400C

### **Purpose of Test:**

To demonstrate the equipment's ability to properly handle the many ways a ballot could be marked by the voter. This test will demonstrate the following:

**Blank Ballot** – outstacked for review by operator, ability to count and process.

**Over-Voted Ballot** - outstacked for review by operator, ability to count and process.

Write-in ballot - ballot counted, counted ballot is sorted to write-in bin for separation.

<u>Properly Marked Ballots</u> - one of each ballot style to demonstrate the ability to tabulate split precincts.

### **Print results:**

Produce and examine results report.

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### Functional Test - Insight

#### **Purpose of Test:**

To demonstrate the equipment's ability to properly handle the many ways a ballot could be marked by the voter. This test will demonstrate the following:

Blank Ballot - returned to the voter with message to correct, ability to count "as is"

Over-Voted Ballot - returned to the voter with message to correct, ability to count "as is"

Write-in Ballot - ballot counted, sorted to write-in bin for later inspection if necessary.

Absentee Ballot - ballot rejected, override button pushed, machine will not accept

**<u>Defaced Ballot</u>** - ballot rejected, override button pushed, machine will not accept

<u>Power Outage and Auxiliary Bin</u> - allows for continuous voting in the event of a power outage. Note number of ballots on public counter, unplug Insight, wait, restore power. Verify that public counter is correct.

<u>Properly Marked Ballots</u> - one of each ballot style for each Insight to demonstrate the ability to tabulate split precincts.

#### **Close Polls and Print Results:**

Produce and examine final results tapes.

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### Functional Test - Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to properly handle the many ways a ballot could be cast by the voter. This test will demonstrate the following:

<u>Blank Ballot / Under-Voted Race</u> – Review screen will alert voter that a race is not fully voted, voter has ability to correct or cast vote "as is"

<u>Over-Voted Ballot</u> – Demonstrate that it is not possible to overvote on the Edge

Write-in Ballot – Demonstrate ability to cast a write-in vote

<u>Cancel a Vote</u> - Demonstrate the ability to remove a vote both before and after the VVPAT Ballot image has been created

**Power Outage** – Unplug the Edge and demonstrate the ability to operate on battery back-up

**Properly Marked Ballot** – Cast a vote for the first position in each race

<u>Audio Vote</u> - Cast a vote using the tactile device for the first position in the first race

#### **Close Polls and Print Results:**

Produce and examine final results tapes

### Volume Test - 400C

#### **Purpose of Test**:

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

One test deck will be marked according to the attached marking plan using a one, two, three, etc. pattern. In addition, a write-in vote, a blank ballot, and an over-voted ballot will be tested. Additional ballots from each style have been marked for the first position in each race. This test deck will be run three times.

A machine report will be printed. The results will be merged into the tabulation system. The expected results will be verified.

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### Volume Test - Insight

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

One test deck for five Insights will be marked according to the attached marking plan using a one, two, three, etc. pattern. In addition, a write-in vote, a blank ballot, and an over-voted ballot will be tested. Additional ballots from each style have been marked for the first position in each race. Each test deck will be run once.

The polls will be closed and results will be printed. The memory pack will be merged into the tabulation system. The expected results will be verified.

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### Volume Test - Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

Votes will be cast on five Edge touch screen voting machines. This test will be accomplished by running a simulation script on each machine. The simulation script will generate a one, two, three, etc pattern according to the attached marking plan. In addition, a manual vote will be cast for Pierce County Proposition No. 1 - Approved.

The polls will be closed and results will be printed. The results cartridge will be merged into the tabulation system. The expected results will be verified.

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### Functional Test - Early Vote Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots from all precincts in Pierce County.

### **Test Plan Description:**

Votes will be cast on one Edge touch screen voting machines. This test will be accomplished by running a simulation script on the machine. The simulation script will generate a one, two, three, etc pattern according to the attached marking plan.

The simulation script takes approximately 10 hours to complete. It will be launched on Tuesday, May 13<sup>th</sup>. The results will be verified the next morning.

The polls will be closed and results will be printed to the Voter Verifiable Paper Audit Trail. The expected results will be verified.

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### Functional Test - Early Vote Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots from all precincts in Pierce County.

### **Test Plan Description:**

Votes will be cast on one Edge touch screen voting machines. This test will be accomplished by running a simulation script on the machine. The simulation script will generate a one, two, pattern according to the attached marking plan.

The simulation script takes approximately 10 hours to complete. It will be launched on Tuesday, May 13<sup>th</sup>. The results will be verified the next morning.

The polls will be closed and results will be printed to the Voter Verifiable Paper Audit Trail. The expected results will be verified.

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### Functional Test - 400C

#### **Purpose of Test:**

To demonstrate the equipment's ability to properly handle the many ways a ballot could be marked by the voter. This test will demonstrate the following:

<u>Blank Ballot Card and Blank RCV Ballot Card</u> – outstacked for review by operator, ability to count and process.

<u>Over-Voted Ballot Card and Over-Voted RCV Ballot Card</u> - outstacked for review by operator, ability to count and process.

<u>Write-in Ballot Card and Write-in RCV Ballot Card</u> - ballot counted, counted ballot is sorted to write-in bin for separation.

<u>Properly Marked Ballots</u> - one of each ballot style for both ballot cards to demonstrate the ability to tabulate split precincts.

#### **Print results:**

Produce and examine results report.

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### Functional Test - Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to properly handle the many ways a ballot could be cast by the voter. This test will demonstrate the following:

<u>Blank Ballot / Under-Voted Race</u> – Review screen will alert voter that a race is not fully voted, voter has ability to correct or cast vote "as is"

<u>RCV Un-voted Rank</u> – Review screen will alert voter that an RCV race is not fully voted, voter has ability to correct or cast vote "as is"

<u>Over-Voted Ballot</u> – Demonstrate that it is not possible to over-vote on the Edge

Write-in Ballot – Demonstrate ability to cast a write-in vote

<u>Cancel a Vote</u> - Demonstrate the ability to remove a vote both before and after the VVPAT Ballot image has been created

**Power Outage** – Unplug the Edge and demonstrate the ability to operate on battery back-up

<u>Properly Marked Ballot</u> – Cast a vote for the first position in each race

**Audio Vote** - Cast a vote using the tactile device for the first position in the first race

**RCV Audio Vote** - Cast a vote using the tactile device for the first position in the first Ranked Choice Voting race

#### **Close Polls and Print Results:**

Produce and examine final results tapes

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# Functional Test – RCV Advancement and Algorithm

#### **Purpose of Test:**

To demonstrate the ability to properly handle the many ways a RCV ballot card could be cast by the voter. This test will demonstrate the following:

### **Test Plan Description:**

One test deck will be marked according to the attached marking plan. The test deck will be run on the 400C.

A machine report will be printed. The results will be merged into the tabulation system. The expected results will be verified. The algorithm will be applied and expected algorithm results will be verified.

A hand count of the ballots will occur to demonstrate the advancement and algorithm process.

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### **Volume Test - 400C Absentees**

### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

One test deck will be marked according to the attached marking plan using a one, two pattern. In addition, a write-in vote, a blank ballot, and an over-voted ballot will be tested. Additional ballots from each style have been marked for the first position in each race. RCV ballots will be marked according to the attached marking plan. This test deck will be run three times.

A machine report will be printed. The results will be merged into the tabulation system. The expected results will be verified.

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### Volume Test - 400C Polls

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

One test deck will be marked according to the attached marking plan using a one, two pattern. In addition, a write-in vote, a blank ballot, and an over-voted ballot will be tested. Additional ballots from each style have been marked for the first position in each race. RCV ballots will be marked according to the attached marking plan. This test deck will be run three times in a precinct header mode. Insights will not be used in the General Election.

A machine report will be printed. The results will be merged into the tabulation system. The expected results will be verified.

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### Volume Test - Edge

#### **Purpose of Test:**

To demonstrate the equipment's ability to count and tabulate ballots.

### **Test Plan Description:**

Votes will be cast on five Edge touch screen voting machines. This test will be accomplished by running a simulation script on each machine. The simulation script will generate a one, two pattern according to the attached marking plan. In addition, a manual vote will be cast for Initiative to the People No. 872 – Yes.

The polls will be closed and results will be printed. The results cartridge will be merged into the tabulation system. The expected results will be verified.

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## Provisional/Emergency Certification Sequoia Voting Systems Version 4.0

### **Version Number Verification**

Machine/Application	S/W or Firmware Version
AVC Card Activator	5.1.22
Edge ABU	8.6
Edge II	5.1.23
Edge VVPAT Printer	1.02
Insight HPX	K1.44.080422.1500
Insight APX	K2.16.080408.1330
MPR	MPR3.01.080422.0552
WinEDS	4.0.107
WinEDS Extended Services	1.0.41
WinEDS Reporting	4.0.41
WinETP (400C)	1.16.6

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